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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/518,033	12/12/2005	William Davidson	047717/300289	5416
826 7590 11/23/2007 ALSTON & BIRD LLP BANK OF AMERICA PLAZA 101 SOUTH TRYON STREET, SUITE 4000 CHARLOTTE, NC 28280-4000			EXAMINER JIANG, YONG HANG	
			ART UNIT 2612	PAPER NUMBER
			MAIL DATE 11/23/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/518,033	DAVIDSON ET AL.	
	Examiner	Art Unit	
	Yong Hang Jiang	2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 December 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 December 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/14/2004</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the latch described in claims 10-15 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

2. Claims 1-3, and 9-11 are objected to because of the following informalities:

Claim 1 recites the phrase "continuing data" on line 4; the phrase should be --containing data--. Appropriate correction is required.

Claims 2-3 and 10-11 depend on claim 1; therefore they suffer the same deficiency.

Claim 9 is missing the word --circuit-- on line 4 from the last line after the phrase "POR". Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 10-15 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

This application is claiming priority to a previously filed PCT application, but the specification used in the PCT application and the current application fail to disclose a latch as claimed in claims 10-15; Figures 1-3 also fail to properly illustrate a latch as claimed in claims 10-15.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 1, 3, 4, 6, and 10-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barrett, Jr. (US 4,471,345) and further in view of Marsh et al. (US 5,537,105).

Regarding claim 1, Barrett discloses an identification system (See Figure 2) comprising a reader (via portal interrogation transmitter and receiver 15) including a transmitter (via output 16) for transmitting a signal and a plurality of transponders (via identification tags 13 and 14), each transponder including a receiver for receiving the reader signal and a transmitter (via loop 60 operative both for reception and transmission) for generating a response signal containing data (via identification code transmitted) which identifies the transponder, the transponder being adapted to transmit the response signal at intervals which are pseudo-random in length (via response signals generated using output fed from pseudorandom binary sequence reply counter

89), characterised by a counter (89) driven by a clock (77), the output from the counter providing a random number (via random number from flip-flops 204, 205 and 206 constituting the binary sequence reply counter 89) to affect the randomness of the intervals between the response signals. (See the Abstract, Col. 2, line 33-Col. 4, line 27; Col. 7, line 44-Col. 9, line 4; Col. 14, line 50-Col. 15, line 2; Figures 1-5)

But Barrett fails to disclose the transponder being adapted to repeat the transmission of the response signal.

Marsh et al. teach an electronic identification system to identify a plurality of transponders. When interrogated, the transponders repeatedly transmits a response signal containing data which identifies the transponder. (See the Abstract)

From the teachings of Marsh et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Barrett to include the transponders being adapted to repeat the transmission of the response signal in order to increase the probability of successful reception by the interrogator.

Regarding claim 3, Barrett discloses the counter and clock is part of an RFID chip (See Figures 3-5).

Regarding claim 4, see transponder in identification system in claim 1 above.

Regarding claim 6, Barrett discloses using an integrated circuit (via solid state circuit devices) in the transponder of identification system in claim 1 above. (See Col. 7, lines 44-47; and Claim 1 above)

Regarding claims 10, 12 and 14, Barrett discloses the counter and clock are routed to a latch (flip flop 204) such that when a command is received by the

transponder, the instantaneous value of the counter is stored in the latch. (See Col. 14, line 44-Col. 15, line 2)

Regarding claims 11, 13 and 15, Barrett discloses the latch provides a random number (via a random number from the flip flop 204) for a random number generator to affect the randomness of the intervals between the response signals. (See Col. 14, line 44-Col. 15, line 2)

8. Claims 2, 5, 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barrett, Jr. in view of Marsh et al. and further in view of Burstein et al. (US 5,744,990).

Regarding claims 2, 5 and 7, the combination of Barrett and Marsh et al. disclose the structural elements of the claimed invention but fail to disclose the counter and the clock are reset upon activation of a POWER-ON-RESET (POR) circuit.

Burstein et al. teach the use of a power on reset circuit comprising a capacitor (n5) to store charge to a predetermined value (one pmos threshold below a supply voltage) to activate a POR circuit, the circuit is used in digital systems to ensure the digital system is operating with a stable power supply. Once the power supply has stabilized within its desired operating range, a POR signal is generated to initialize various components in the system, such as flip-flops, memory devices, and clock generators. (See the Abstract, Col. 1, lines 5-25; and Col. 5, line 53-Col. 6, line 10)

From the teachings of Burstein et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Barrett and Marsh et al. to include a POR circuit to send a signal to reset the counter

and the clock in order to ensure the transponder is operating with a desired power supply for proper operation.

Regarding claim 8, Barrett discloses the integrated circuit is part of an RFID chip (via identifications tags are small solid state circuit devices). (See Col. 7, lines 44-47)

9. Claim 9 rejected under 35 U.S.C. 103(a) as being unpatentable over Barrett, Jr. (US 4,471,345), and further in view of Burstein et al. (US 5,744,990).

Regarding claim 9, Barrett discloses a method (via method using portal 15 to interrogate and communicate with identification tags 13 and 14) of identifying a plurality of transponders, comprising exposing a transponder to RF (via portal 16 transmitting interrogation signal), the transponder being responsive to a command signal (interrogation signal) from a reader (portal 15) to cause the transmission of a response signal, containing data (via identification transmitted back to portal 15) which identifies the transponder, at intervals which are random or pseudo-random in length, characterised by a counter (via response signals generated using output fed from pseudorandom binary sequence reply counter 89) driven by a clock (77) to provide an output signal when the command signal has been received, the output signal providing a random number (via random number from flip-flops 204, 205 and 206 constituting the binary sequence reply counter 89), a slot selection (via randomly selected time slot) for the response signals being dependent directly or indirectly on said output signal. (See the Abstract, Col. 2, line 33-Col. 4, line 27; Col. 7, line 44-Col. 9, line 4; Col. 14, line 50-Col. 15, line 2; Figures 1-5)



But Barrett fails to disclose a capacitor is charged to a predetermined value to activate a POWER-ON-RESET (POR) circuit, and the counter and the clock responsive to activation of the POR circuit to provide an output signal.

Burstein et al. teach the use of a power on reset circuit comprising a capacitor (n5) to store charge to a predetermined value (one pmos threshold below a supply voltage) to activate a POR circuit, the circuit is used in digital systems to ensure the digital system is operating with a stable power supply. Once the power supply has stabilized within its desired operating range, a POR signal is generated to initialize various components in the system, such as flip-flops, memory devices, and clock generators. (See the Abstract, Col. 1, lines 5-25; and Col. 5, line 53-Col. 6, line 10)

From the teachings of Burstein et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Barrett to include charging a capacitor to a predetermined value to activate a POR circuit, and modifying the counter and the clock to be responsive to activation of the POR circuit to provide an output signal in order to ensure the transponder is operating with a desired power supply for proper operation.

### ***Conclusion***

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yong Hang Jiang whose telephone number is 571-270-3024. The examiner can normally be reached on M-F 7:30 am to 5:30 pm alternate fridays off.

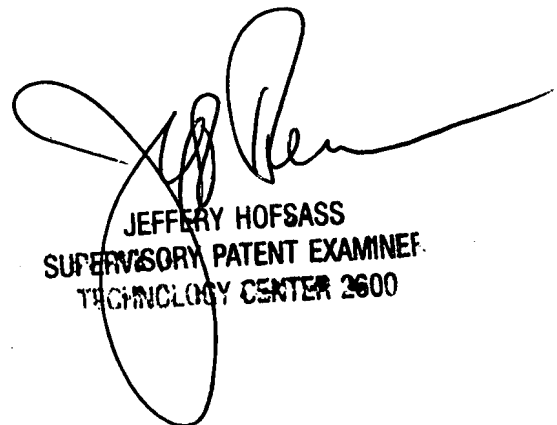
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Hofsass can be reached on 571-272-2981. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

YHJ



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